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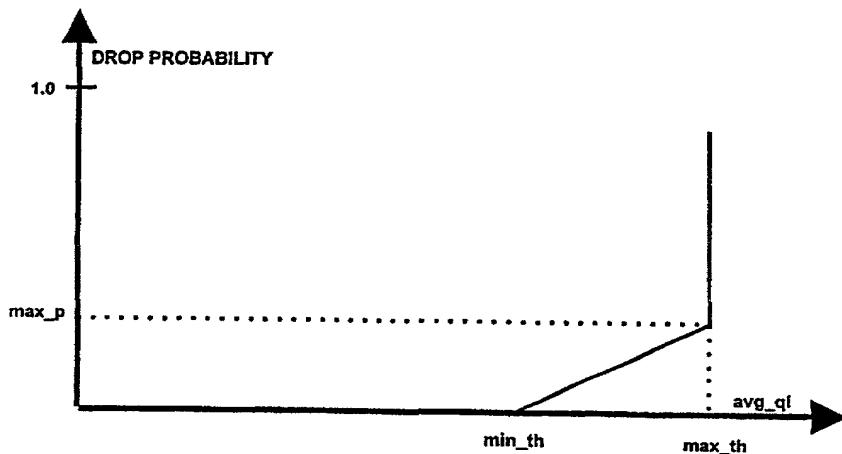
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(54) Title: METHOD, SYSTEM AND ROUTER PROVIDING ACTIVE QUEUE MANAGEMENT IN PACKET TRANSMISSION SYSTEMS



(57) Abstract

The present invention provides a method of active queue management for handling prioritised traffic in a packet transmission system. The method is able to provide differentiation between traffic originating from rate adaptive applications that respond to packet loss. Traffic is assigned one, of at least a first and second, drop precedent level, namely in profile and out of profile. The method includes the steps of: calculating an average queue length, avg ql; assigning minimum thresholds, min\_th\_in and min\_th\_out, for in profile packets and out of profile packets respectively, and a maximum threshold, max\_th; retaining all packets with their initially assigned drop precedent levels while the average queue length is less than, or equal to, a threshold th\_in; assigning a drop probability to each packet, determined from the average queue length; retaining all packets while avg ql is less than th\_in; and dropping packets in accordance with their assigned drop probability; the parameter max\_p\_out is greater than max\_p\_in, where max\_p\_out is the maximum drop probability of packets marked as out of profile and max\_p\_in is the maximum drop probability for packets marked as in profile.